

**REMARKS**

Claims 15 through 17 are pending in this Application. Claim 14 has been cancelled, claims 15 and 16 amended and new claim 17 presented replacing claim 14. Care has been exercised to avoid the introduction of new matter. Indeed adequate descriptive support for the present Amendment should be apparent throughout the originally filed disclosure. Applicants submit that the present Amendment does not generate any new matter issue.

**Claim 15 was rejected under the second paragraph of 35 U.S.C. §112.**

In the statement of the rejection the Examiner raised indefiniteness issues concerning the language requiring the second ions to form a redox system in combination with the first ions. The Examiner also questioned whether claim 15 is consistent with claim 14. This rejection is traversed.

In response the language considered objectionable by the Examiner in claim 15 has been deleted. Claim 14 has been rewritten and presented as new claim 17. The plating bath defined in independent claim 17 is a plating bath precursor which comprises first and second metal ions which form a redox system. The plating bath is stabilized against reduction and deposition of the second metal ions. Prior to use, the first metal ions are reduced from a higher oxidation state to a lower oxidation state to activate the bath. Claim 15 merely specifies the second metal ions.

Applicants submit that one having ordinary skill in the art would have no difficulty whatsoever understanding the scope of the claimed invention, particularly when reasonably interpreted in light of and consistent with the written description of the specification, which is the judicial standard. *Miles Laboratories, Inc. v. Shandon, Inc.*, 997 F.2d 870, 27 USPQ2d 1123 (Fed. Cir. 1993). Applicants, therefore, submit that the imposed rejection of claim 15 under the second paragraph of 35 U.S.C. §112 is not legally viable and, hence, solicit withdrawal thereof.

**Claims 14 through 16 were rejected under 35 U.S.C. §102 for lack of novelty as evidenced by Takano et al.<sup>1</sup>**

In the statement of the rejection the Examiner asserted that Takano et al. disclose a plating bath corresponding to that claimed. This rejection is traversed.

The factual determination of lack of novelty under 35 U.S.C. §102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art. *Dayco Prods., Inc. v. Total Containment, Inc.* 329 F.3d 1358 (Fed. Cir. 2003); *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002). There is a fundamental difference between the claimed plating bath precursor and that disclosed by Takano et al. that scotches the factual determination that Takano et al. disclose a plating bath precursor identically corresponding to that claimed.

Specifically, the present invention relates to a plating bath precursor, in which a reaction is prevented from proceeding. Stable tetravalent titanium ion is used instead of trivalent titanium ion. Trivalent cobalt ion and tetravalent tin ion are used in a similar manner.

At the time of employing the claimed plating bath precursor, a fraction of the aforementioned metal ion is reduced by electrolyzing, which acts to start the reaction. Accordingly, the reaction proceeds in a state where tetravalent titanium ion coexists with trivalent ion. This is completely different from the plating bath of Takano et al.

Indeed, in accordance with the teachings of Takano et al., the plating bath is prepared employing trivalent titanium ion which results in a reactions and, therefore, the bath is not a

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<sup>1</sup> As claim 17 replaced claim 14, Applicants will treat this rejection as though applied against claims 15 through 17, claim 17 being the independent claim.

precursor which is activated before use. Again, in accordance with the present invention, reaction proceeds where tetravalent titanium ion coexists with the trivalent ion; whereas, in accordance with Takano et al., trivalent titanium ion is used and the reaction proceeds, such that it is not a bath precursor. Thus, the present precursor assumes a fundamentally different reactive form than the bath disclosed by Takano et al.

The above argued differences between the claimed plating bath precursor and the plating bath disclosed by Takano et al. undermine the factual determination that Takano et al. disclose a plating bath precursor identically corresponding to that claimed. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claims 14 through 16 under 35 U.S.C. §102 for lack of novelty as evidenced by Takano et al. is not factually viable and, hence, solicit withdrawal thereof.

#### **New claim 17.**

As previously pointed out new claim 17 replaced claim 14. Takano et al. neither disclose nor suggest a plating bath precursor as claimed, wherein reaction is prevented from proceeding by employing a stable tetravalent titanium ion instead of trivalent titanium ion. The reaction proceeds in a state where tetravalent titanium ion coexists with trivalent ion; whereas, in the bath disclosed by Takano et al., trivalent titanium ion exists with no activation before use. Thus, the claimed bath **precursor** assumes a different reactive form than the bath disclosed by Takano et al.

Based upon the foregoing, Applicants submit that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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